

Remarks

Prior to examination, it is requested that the present Preliminary Amendment be entered into this application. The Preliminary Amendment includes 4 independent claims and 40 claims in total. Accordingly, it is believed that \$222 is due in connection with the present submission (the \$42 small entity fee for the extra independent claim above three paid for in the basic filing fee, and the \$180 small entity fee for the extra 20 claims beyond the twenty 20 paid for in the basic filing fee). Authorization is hereby provided to charge Deposit Account No. 50-1604 for all amounts necessary, and it is requested that any overpayments in this application be credited thereto.

This application is a continuation of U.S. Patent Application Serial No. 09/138,588 issued as U.S. Patent No. 6,321,931 B1 on November 27, 2001. The present Preliminary Amendment sets forth additional claims beyond those previously patented, and the accompanying Information Disclosure Statement (filed under separate cover) encloses new art that has recently been brought to applicant's attention. As discussed below, the present claims are all believed to be patentable over both the new art and the art previously of record.

The present Amendment also adds brief text to the specification, as set forth above. The paragraph is merely added to provide text corresponding to structure in the drawings recited in several of the new dependent claims. This text adds information to the specification which corresponds to information already shown in the drawings of the present application as originally filed, and as filed in the parent application. Specifically, this paragraph refers to the fact that the flexible material of the valve is preferably bowl shaped, and that original Figures 8(d) and 8(e) show the flexible material when not in use, then when in use (i.e. before and after inversion), all of which is shown in the figures themselves and in the text provided thereon. Accordingly, no new matter has been added. *See*, M.P.E.P. §2163.006 (8th Ed., p. 2100-172) (information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter).

Description of the Invention of Claim 31 and Claim 40

New Claim 31 recites the method of providing a no spill drinking apparatus for use by a child. Corresponding Claim 40 is substantially similar to Claim 31, the difference being that it is an apparatus claim, and merely recites the structure of the apparatus, regardless of who it is provided for. In either claim, and likewise with all of the remaining independent claims of the application, the cap assembly as covered by the claim can be provided separately or can be provided conjunction with an associated cup.

The invention of Claims 31 and 40 can be summarized as follows: The no-spill apparatus has a spout for drinking therefrom, with the apparatus being specially designed to prevent leakage of liquid out of the spout when it is not in use. Specifically, the apparatus has a valve made of a flexible material, the flexible material having an opening in it. *See e.g.*, the '931 patent, Figure 3, showing a valve 42 made of a flexible material with an opening 70 in the material. This opening can be a hole, a slit, or any other opening desired. *See e.g.*, '931 patent, Col. 8 lines 56-61.

The opening of the flexible material normally rests against a blocking element (also referred to as the "center stop") which blocks the flow of liquid through the opening. *See e.g.*, blocking element 52 in Figure 3 and Figure 8(d), and Col. 6 lines 62-67. When the user drinks out of the spout, the negative pressure or sucking of the user at the spout causes the flexible material to rise off of this blocking element, unblocking the opening, and allowing liquid to flow through the opening. *See e.g.*, Col. 7 lines 1-9 and lines 29-31.

Such a no-spill drinking apparatus is not taught or suggested in any of the art of record. In the parent application to the present continuation, applicant set forth broader claims than those set forth herein, and claimed a no-spill apparatus with an opening in a flexible valve member that rests against a blocking element and rises off of the blocking element upon application of negative pressure. Those

claims were all held to be allowable and were issued as a patent. *See*, U.S. Patent No. 6,321,931 B1 issued November 27, 2001 (Serial No. 09/138,588). The present claims have additional limitations therein are likewise believed to be allowable.

New References Submitted with Accompanying IDS

The accompanying Information Disclosure Statement being filed under separate cover presents additional art for inclusion in the record, and for the Examiner's review.

The new references include U.S. Patent No. 5,250,266 issued to Kanner ("Kanner"), U.S. Patent No. 4,324,097 issued to Schmitt et al. ("Schmitt"), and European Patent Application No. 0 388 828 applied for by ICA S.P.A. ("ICA").

None of these references teach or suggest a no-spill drinking apparatus. Kanner teaches an appliance for disinfecting contact lenses. *See e.g.*, Col. 2 lines 4-7. Schmitt teaches a non-return valve for control of gas flows alternating at high frequencies, such as for use in an internal combustion engine. *See e.g.*, Col. 1 lines 36-44. ICA teaches a unidirectional valve for releasing gas that builds up within a container (*See e.g.*, Col. 1 lines 15-28, discussing a coffee container), or for a squeeze bottle for squeezing out fluids such as a shampoo or liquid soap (*See e.g.*, Col. 4 lines 37-41).

The references also do not teach or suggest the method of providing an apparatus for the use of children, to prevent the accidental spilling of liquid. It is submitted that the references, which teach an apparatus for high frequency gas flow, for disinfecting contact lenses, and for materials such as shampoo or liquid soap, or so forth, are entirely unrelated to a no-spill drinking apparatus and are not analogous art.

Furthermore, the references teach away from a no-spill drinking apparatus, and from the present invention. Kanner discloses the use of a one-way valve, and teaches that the device is intended to prevent any entry of air into the disclosed device, e.g., to prevent bacterial contamination etc. *See*, Col. 3 lines 2-7. ICA likewise teaches a unidirectional (one-way) valve. The ICA valve is intended to allow

the outlet of gases from a bag, and is also intended to prevent air from entering the bag. *See*, Col. 1 lines 20-28. These devices, therefore, are provided to allow the exit of gases or fluid building up within the container, and are specifically designed to prevent air from entering into the container.

A no-spill cup apparatus, however, specifically requires the opposite – that air be allowed to enter into the device. When liquid exits, air must be allowed to enter: if the device were designed to prevent air from entering, drinking would be very difficult. If air were prevented from entering, and if any liquid could be initially sucked out of the device, it would produce a vacuum inside, preventing further drinking of liquid or else making it progressively more and more difficult to drink therefrom. A device which prevents drinking is the opposite of what is desired for a no-spill apparatus, particularly a no-spill apparatus provided for ease of use of children.

Accordingly, none of the references are believed to teach or suggest the present invention, both as claimed above and as previously claimed in the '931 patent.

The pending claims in the present Preliminary Amendment are also patentable for additional reasons as well. In addition to the limitation of a flexible valve and blocking element discussed above, Claims 31 and 40 also recite that the no-spill cup is provided with a spout for drinking. Neither Kanner, Schmitt or ICA teach or suggest providing a drinking spout. Nor do they teach a user sucking through a spout to drink from the spout. The flexible material in those three references moves from application of pressure inside a container, and not due to negative pressure at a spout, in contrast to the present invention.

Claims 31 and 40 also recite the presence of an air vent. Kanner, Schmitt and ICA do not teach or suggest the presence of such a vent, either. Moreover, on the contrary, as discussed above, Kanner and ICA specifically teach that their disclosed products should not allow air in, and therefore specifically do not have such a vent.

Accordingly, Claims 31 and 40 are believed to be fully patentable.

Invention of Claim 50 and Claim 60

Claim 50 (the method claim) and Claim 60 (the similar apparatus claim) recite the above limitations of Claims 31 and 40, respectively, and also add the additional limitation that the valve of flexible material begins to invert (i.e. turn inside out) when negative pressure is applied to the flexible material.

This feature is also not taught or suggested in Kanner, Schmitt or ICA. In all three of those references, the flexible material merely expands outward from pressure within. It does not begin to turn inside out. In a preferred embodiment of the invention, in contrast, the flexible material begins to turn inside out. *See e.g.*, Col. 7 lines 4-8. An example of the valve before and after turning inside out is shown by comparing the position of valve 42 in its resting state, as shown in Figure 8(d), with its position upon application of negative pressure, as shown in Figure 8(e).

As a result, these claims are all believed to be patentable for this reason as well.

Dependent Claims 59 and 70

In a further preferred embodiment, this valve which begins to turn inside out is bowl shaped, as claimed in Dependent Claims 59 and 70, as recited in the amended text above, and as shown in the original drawings. The top side of the bowl (i.e. the part where the rim is located) is located closer to the spout than the bottom of the bowl; and the bottom of the bowl has the opening therein. The bottom of the bowl (with the opening) moves towards the top of the bowl (i.e. the bottom of the bowl moves towards the rim of the bowl) allowing the passage of liquid through the opening. This feature is also not taught or suggested in Kanner, Schmitt or ICA. Accordingly, these dependent claims are also believed to be fully parentable.

Dependent Claims with a Soft Spout

Dependent Claims 36, 37, 45, 46, 55, 56, 65 and 66 further recite that the apparatus is provided with a soft spout. Such a spout provides comfort to the child or user when drinking.

No art is believed to teach or suggests an apparatus having the limitations of the independent claims and also having a soft spout. Although soft spouts are disclosed for example in U.S. Patent No. 4,801,027 the reference does not teach or suggest a no-spill apparatus, nor does it teach or suggest an apparatus having the limitations of the independent claims. Accordingly, these claims are also all believed to be patentable.

Dependent Claims with a Removable Valve Holder

Dependent Claims 34, 37, 43, 46, 47, 53, 56, 63, 66, and 67 further recite that the apparatus is provided with a separable (i.e. removable) valve holder. No art is believed to teach or suggests an apparatus having the limitations of the independent claims and also having a removable valve holder. Accordingly, these claims are also all believed to be patentable.


Dependent Claims with Increased Thickness on Sealing Area

Claims 35, 37, 44, 46, 47, 54, 56, 64, 66, 67 recite that the flexible material of the valve is provided with a greater thickness of material on the area which seals against said blocking element. No art is believed to teach or suggests an apparatus having the limitations of the independent claims and also having a greater thickness of material on an area sealing against a blocking element. Accordingly, these claims are also all believed to be patentable.

In view of the above, all of the claims of the application are believed to be fully patentable. Favorable action on the application and allowance of all of the claims is respectfully requested and believed to be fully warranted.

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Respectfully submitted,



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